# What is Effective in Massage Therapy? Well, "It Depends…": a Qualitative Study of Experienced Orthopaedic Massage Therapists

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*Background:* Massage has been used as a treatment for musculoskeletal pain throughout history and across cultures, and yet most meta-analyses have only shown weak support for the efficacy of massage. There is a recognised need for more research in foundational questions including: how massage treatments are constructed; what therapists actually do within a treatment, including their clinical reasoning; and what role therapists play in determining the effectiveness of a massage treatment.

*Purpose:* The aim of this study was to explore what experienced orthopaedic massage therapists consider to be the aspects of their work that contribute to effectiveness.

*Setting and Participants:* Semi-structured interviews were conducted via Zoom with six experienced orthopaedic massage therapists in Australia.

*Research Design:* The interviews were analysed using inductive thematic analysis, seeking insights that might be practically applied, rather than theory-driven interpretations.

*Results:* The participants focused on the underlying differences between clients, between therapists, and between treatments, and clearly indicated that this concept of "difference" was foundational to their view of their work and was the underlying context for the comments they made. Within that frame of "difference", three key themes were interpreted from the data: (1) "Everyone is different so every treatment is different": how they individualised treatment based on these differences; (2) "How therapists cope with difference": how they managed the challenges of working in this context; and (3) "What makes a difference": the problem-solving processes they used to target each treatment to meeting the client's needs.

*Conclusions:* Participants did not identify specific techniques or modalities as "effective" or not. Rather, a therapist's ability to provide effective treatment was based on an iterative process of treatment and assessment that allowed them to focus on the individual needs of the client. In this case "effectiveness" could be considered a process rather than a specific massage technique.

KEYWORDS: massage therapy; effectiveness; massage therapist; pain; qualitative research; complementary therapies

## INTRODUCTION

In modern society pain presents a significant health concern[1] and research studies in 2007 and 2017, respectively, have shown that 38% of adults in the USA[2] and 20.7% of Australians[3] consulted massage therapists, with another study determining that 72% of massage therapy visits were for back or neck pain.[4] Despite this significant usage, massage research literature only shows weak support for the efficacy of massage in relation to pain, due largely to low quality evidence.[5-7]

Massage therapy has predominantly followed the medical model of research to establish its credibility as an evidence-based treatment for musculoskeletal issues.[8-10] Research, largely using randomised controlled trials (RCTs), has focused on the

efficacy of massage for: particular parts of the body such as the lower back,[11] knee[12] or neck[13]; specific conditions such as carpal tunnel syndrome[14] or headaches[15]; or using specific massage techniques such as myofascial release[16] or trigger point work.[17] The outcomes of efficacy studies have generally been unclear, and methodology reviews, systematic reviews (SRs), and meta-analyses have outlined many criticisms of the methodology used in massage research.[9,18-20]

Many aspects of massage remain understudied. For example, only a few studies have examined such variables as dosage (i.e., the length and number of treatments),[12,21] or the therapeutic relationship.[22] There is also lack of definition around what a massage treatment involves, and how massage therapists combine individual techniques.[6,23-25] Massage therapists often express a wish for clinical research,[10,26-28] yet indicate that studies often do not reflect the way they work with their own clients, and thus they hesitate to incorporate the so-derived evidence.[24,26,28,29] A review of natural therapies by the National Health and Medical Research Council of Australia (NHMRC)[6] stated that many RCTs or SRs did not report on "the intensity or depth of massage therapy, the method of applying touch, the theoretical framework underlying the intervention or the training and experience of the massage therapist". The review committee concluded that "there is little data about what constitutes an effective massage therapy session" (Australia Dept. of Health, p.98).[6]

Many potential influences on massage therapy effectiveness have not yet been researched, including those related to the therapist. The first Massage Research Agenda Workshop in 1999 had a stated priority for research into "studies which determine what makes a 'good' or 'great' massage therapist" (Kahn, p.1),[30] and subsequently commissioned a recommendations report.[31] This report stated that massage therapy needed to understand itself before it could make claims about comparative effectiveness or investigate biological mechanisms. The report suggested that more research should focus on the actions, decision-making processes, attitudes, attributes, and education that contribute to the success of therapists.

Only a small number of studies have directly explored what massage therapists do in a treatment session or their clinical reasoning process. Porcino et al.[24] interviewed massage therapists to learn more about how they worked and found that individualisation of treatment was a core value of massage therapists. Their participants considered that massage expertise was developed as the therapist became even more skilled at tailoring treatments to the needs of the client. Fortune & Hymel[32] videoed massage treatment sessions and then asked the therapists and patients to explain what was taking place. In their findings, the authors identified several unspoken beliefs about treatments. These included: that massage is biomechanical but affects more than the musculoskeletal system; that the massage therapist educates as well as provides treatment; and that higher level concepts, such as the importance of the individualization of treatment and the centrality of the therapist-client relationship, are key to success. Baskwill et al.[33] explored the concept of the professional identity of massage therapists in Canada. The participants spoke about their passion for their work, the importance of competence and confidence, and of the therapeutic relationship, including the empowerment of clients/patients. They also discussed the ways they individualised treatment in collaboration with their clients. Although these studies had different findings because they addressed different questions about the practice of massage therapy, a thread that connected them was that massage therapists were uniformly committed to the provision of individualised treatment rather than using standardised routines and guidelines.

While these studies provided key direct insights into the practice of massage therapy by qualified therapists, there is a notable lack of research exploring what massage therapists consider to be important in determining the effectiveness of a treatment for pain. The purpose of this study was to explore what experienced orthopaedic massage therapists in Australia consider to be the important aspects of effective treatment when working with a client with musculoskeletal pain and/or injury.

## METHODS

This study applied a pragmatic qualitative methodology to better understand

the perspectives of experienced orthopaedic massage therapists about factors that contribute to the effectiveness of massage treatment. Ethics approval for Project Number H18193 was granted by the Human Research Ethics Committee of Charles Sturt University, Australia.

### Participants

Participants were restricted to Australian massage therapists who specifically work with clients with pain and injury or dysfunction from a soft tissue treatment paradigm: "orthopaedic" massage therapists.[34] Formalised massage training in Australia offers three qualification levels: Certificate IV, Diploma, and Advanced Diploma.[35] In order to be insured to work specifically with clients who have particular conditions or injuries, a massage therapist must be qualified at least at the Diploma level.[36] To keep the focus on massage as it is generally understood, massage therapists who treated exclusively within a particular sub-modality (e.g., a Rolfer or Bowen therapist who only treats clients based on that single treatment protocol) or those who used additional tools rather than hands as the focus of treatment (e.g., cupping or dry needling) were excluded.

In determining the participant inclusion criteria, the distinction between "expert" and "experience" was considered carefully. The intention was to identify orthopaedic massage therapists who achieve strong pain management or resolution outcomes for their clients. However, measures of such outcomes do not exist, nor does the capacity to identify therapists who achieve them. Consequently, expertise was determined by a hybrid measure of experience. This included: being fully qualified (e.g., held an Australian Diploma qualification or higher as a massage therapist); having at least 10 years of experience; currently seeing an average 10–12 clients per week; meeting the requirements for professional massage association membership (e.g., hold insurance, maintain a current First Aid certificate, and do yearly continuing education); and having undertaken at least five different continuing education courses related to the treatment of pain and injury over the last 10 years.

Participants were identified using the principles of "critical case"(Flick, p.28)[37] or "key informant" (Patton, p.430)[38] purposive sampling, which is a strategy to identify and recruit those participants who are most relevant to answering the research question with depth and insight.[39] Almost 30 massage therapists, known within the Australian massage workforce by reputation for their clinical focus and seniority in the field, were identified through analysis of their online professional and social media profiles. The lead author excluded any therapist she knew personally to minimise the risk of conflicts of interest. While two thirds of the massage workforce in Australia is female,[40] the lead author's personal experience suggested that this was not the case for orthopaedic massage therapy and that males would have a greater representation than in many other forms of massage. Consequently, to ensure that there was equal opportunity for both male and female therapists to be included in the study, the researcher split the final list of 20 names into lists of male therapists and female therapists.

### Procedure

Formal invitations to the 20 potential participants were sent alternately from the two lists (male and female), to ensure both had equal opportunity to participate. There was one non-response to the invitation to participate, all other invitations were accepted. After the fifth interview it was clear that, although the participants provided slightly different perspectives, the central message was relatively consistent. One final, sixth, interview was conducted to confirm this impression and although no formal assessment of saturation was taken, the consistency of participant comments and pragmatic considerations[41,42] led to the decision to cap data collection at six interviews.

### Data Collection and Analysis

Prior to the interview, an information sheet was sent to the participants. It included the interview questions, and also a message encouraging them to share their real thoughts and experiences in their work rather than what might be considered acceptable in the field. The semi-structured interviews were conducted via Zoom, with all participants consenting to audio and video recording of the interviews. An interview guide[43] (Appendix A) included open-ended questions that were both broad (e.g., about the successes of the therapist and what they thought made the difference in those situations) and specific (e.g.,

aspects of treatment). The order of questions changed based on the direction of the discussion. The first five interviews were conducted over a three-month period, with the final interview conducted six weeks later. Interview lengths ranged from 1 hour 29 minutes to 1 hour 59 minutes.

Due to the limitations of accurately recording non-verbal communication over Zoom, the recorded interviews were transcribed using a denaturalised approach[44]—that is, transcription was faithful to the words spoken but did not include non-verbal characteristics of the participants' speech. The final transcripts were returned to participants for member checking[45] and no requests for retraction or modification were received. The transcripts were anonymised using pseudonyms and age brackets, and the removal of details that might be recognised such as the names of towns or massage schools.

The transcripts were analysed using inductive Thematic Analysis (TA),[46,47] following principles proposed by Saldana[48] that use an iterative process of first cycle and second cycle coding. In this study, codes were data-driven and inductive and were not mutually exclusive. The codes were derived from the interpretation of what the participants said during the interviews rather than being purely descriptive.[49] All levels of coding were completed within NVivo software[50] for data management (https://lumivero.com/products/nvivo/). To facilitate analytic rigour (i.e., trustworthiness, consistency, transferability, and neutrality) Authors 1, 3, and 4 were all involved with analysis of the transcript data. Authors 1 and 4 completed initial transcript coding. Where there was disagreement, Author 3 was consulted, and discussion ensued until consensus was reached across all three Authors.

The first cycle of coding was the identification of topics raised by participants. Initially the second cycle was an attempt was to combine and rearrange the Cycle 1 codes into like categories around the central concept of "effectiveness" to address the research question. However, participants did not talk extensively about techniques or technical aspects of their work, so a step back enabled the authors to identify a central message that ran through the interviews, which was supported by content analysis of this message across the six interviews. This core message was then used to rearrange the ideas that had been captured in the Cycle 1 coding into broader concepts that became the Cycle 2 codes. Three main themes were developed from the ideas and concepts encapsulated by the coding, followed by subthemes that supported and explained the meanings of the main themes. A final step was taken to confirm the data analysis by grouping participant quotations for each theme and subtheme so that similarities and differences could be compared to confirm the conceptualisation of the theme.

## RESULTS

### Participants

The three male and three female participants were all over 40 years of age and had between 19- and 32-years' experience as a massage therapist (M = 24 yr). Their caseloads ranged from 12 to 40 clients per week (M = 20.83) and focused almost exclusively on orthopaedic massage. In addition, all participants were, or had previously been, involved in formal teaching within the massage industry (Table 1).

### Thematic Analysis

The inductive Thematic Analysis identified a central concept of "Difference", which was categorised into three main themes: "Everyone is different, so every treatment is different"; "How therapists cope with difference"; and "What makes a difference". In considering the research question, it had been predicted that analysis of the data would identify similarities and patterns that might indicate the specific aspects of treatment that the participants thought were "effective"; however, when probed about effectiveness, the participants would answer with "it depends…" and then go on to explain some of the variables that it might depend upon. Rather than discussing specific techniques or aspects of treatment that are "effective", participants insisted that the treatment they provide could not be generalised. They focused on how the differences, rather than the similarities, between people drove their clinical reasoning. They spoke of how they were willing to not know the answer, and how they use a problem-solving process to "make a difference" for each client in an individualised session.

TABLE 1. Participant Demographics

| Pseudonym | Age | Gender | Massage Therapy Experience (Years) | Highest Qualification | Work Location | Average Caseload per Week | Percentage of Caseload Containing Orthopaedic Clients |
|---|---|---|---|---|---|---|---|
| Bridget | 50–59 | Female | 30 | Adv Dip | Clinic, WA | 18 | 100 |
| David | 60–69 | Male | 32 | Adv Dip | Home, VIC | 15 | 100 |
| Lucy | 50–59 | Female | 19 | Degree | Home, NSW | 12 | 100 |
| Paul | 40–49 | Male | 20 | Adv Dip | Clinic, NSW | 40 | 100 |
| Tess | 40–49 | Female | 20 | Adv Dip | Clinic, VIC | 20 | 95 |
| Tom | 60–69 | Male | 23 | Diploma | Clinic, Qld | 20 | 100 |

Adv Dip = Advanced Diploma; WA = Western Australia; NSW = New South Wales; Vic = Victoria; Qld = Queensland.

**Everyone Is Different, so Every Treatment Is Different**

The participants spoke of individualised treatment as central to effective treatment. All clients are different physically and emotionally, all therapists treat differently, and thus every treatment is different. The participants in this study were circumspect about providing treatment recommendations and repeatedly said that their treatment would depend on the person in front of them. David described the factors he would take into consideration including: presentation (symptoms, pain, general health, mobility), how they came to him (referred from another practitioner or never had bodywork before), their movement, their interests and goals, his assessment, their physical capabilities, and the information he gained through palpation. He created a hypothesis based on the individual in front of him rather than on "predetermined patterns". Bridget captured the commitment of the participants to individualise the treatment to the needs of each client:

> "It's very independent. I can't give you an answer because it is too individual. It depends upon the person on my table and where they are in their headspace and their physical space on that given day."

All participants gave numerous examples of the physical differences that they actively look for when assessing and treating their clients. Some of the factors mentioned included: acute injury or long-term issue, the prognosis of the injury, the outcome of the assessment process, what the client tells the therapist, how the client moves, what their gait looks like, what the tissue feels like under their palpation.

Participants acknowledged that the psychological and emotional influences on a client were also important. Tess, Bridget, and Lucy all had a strong focus on the emotional state of the client being just as relevant to treatment as the physical components of the client's situation because each client is a "whole person" (Bridget, Lucy). Conversely, Tom and Paul were less comfortable delving into the emotional aspects despite understanding their relevance to the client's physical situation. Tom acknowledged that the emotional needs of the client might create the physical issues, but was clear that he focused on structure and physical dysfunction and, despite having empathy, he "doesn't go there".

All the participants discussed the range of skills and perspectives held by different therapists and praised the diversity of approaches. Lucy considered that someone who had learned things only one way would treat "rigidly", and supported students learning from different teachers to have exposure to different approaches. Paul outlined how he discusses it with his Diploma students:

> "… by the time you guys finish your Diploma, none of you will treat the same even though you've all been educated exactly the same, you will all look completely different. And 12 months down the track, you will all be even further apart and that's the beauty with our industry."

The participants also spoke of how therapists change as they gain clinical experience. Participants talked about "evolving" over time and developing the "confidence to explore", related more closely to the number of clients a therapist worked with rather than the number of years in practice. Both formal ongoing training and experience with clients underpinned the work of each therapist in totally different ways.

Given the underlying premise that all clients are different and their needs change over time, the participants agreed pre-determined protocols had limited use. Instead, the therapist must be able to figure out what the client needs at that point in time and create a treatment to meet those needs, drawing on their knowledge and skills to match each situation. Paul summed up his thinking process as:

> "I say to people, you will never get the same treatment twice off me even if you come in with exactly the same problem you will not get the same treatment because I will do whatever your body needs at that point in time. And then it depends how your body responds at that point in time will determine what I do next."

When asked about their strategies for providing effective treatment, the participants never spoke in general terms about techniques or modalities. They repeatedly brought the focus back to the fact that every treatment was different and what was effective would depend on a multitude of interwoven factors.

### How Therapists Cope with Difference

By rejecting the use of protocols or checklists in favour of creating individualised treatment plans, participants indicated that they were not only willing, but believed it was vital to sit comfortably with uncertainty. They spoke of being okay with not knowing what treatment would be effective at the start of a session. Instead, they relied on their connection with the client to gain the information needed to create a unique session for that person.

The participants highlighted that not having a "preconceived idea" was positive, because they "don't know what we don't know" and that they had strategies to figure out what would work during the session. All participants stressed the importance of asking questions: both questions to the client to gather information, and questions that they asked themselves during treatment sessions. Questioning appeared to be the way they stayed open to new information and tested whether they had all the information needed to decide on a treatment step: "What do I need to do more of… maybe I just missed something… my whole process goes back to almost the start, or I'll ask new questions" (Paul). They also used questions to translate their kinaesthetic information into a conscious thought process, as articulated by Bridget:

> "What am I doing with that fascia for iliacus and psoas, what am I doing with that neurovascular bundle through there? How is that affecting what's going on with that pain in the anterior hip and that movement and that freedom of movement?"

Tom demonstrated how asking himself questions helped create a working hypothesis:

> "Why are you sore? I'm not asking them, I'm asking myself why… why are they sore there. So I'm looking at all the scenarios that might cause loading into that area."

One strategy put in place by several participants was to take action even when they were uncertain of the next step. Paul explained that trying something then provides the therapist with further information that helps them do the next thing and the next thing. Bridget also said:

> "… You just make it up. You follow the principles of do no harm… That's what you have to do it's what you do in a clinical situation …You're massaging someone you say I don't know what to do here on the tenth time you go I've got to try something."

Each therapist appeared to hold their own schema or internal framework about effective treatment that helped guide their clinical decision-making and manage

uncertainty. This included their goals within a treatment, how to progress the treatment when there was no defined path, how to prioritise the body tissues to be assessed and treated, and how they understood the connectedness of the body. Having a mental model of the aims and processes of treatment meant that the therapists could focus on gathering information via questioning and assessment and organising it according to their beliefs about the most effective ways to treat.

Treatment decisions were also made in the context of the therapeutic relationship being established with the client. The participants indicated that this relationship gave them the knowledge to create a treatment that is based on the person, not the injury. Tess highlighted the importance of the connection between the therapist and the client:

> "I think there's a certain type of person that does better in this industry than others and it's the people who have really good communication and that ability to build up rapport. Otherwise, you are just treating with protocols and it's not going to have the same kind of impact success."

The inference in this statement was that a therapist must get to know the client well enough to be able to individualise a treatment. The therapist must not only know their client's body, history, and symptoms, but also their preferences, their level of anxiety and stress, and their goals. Rapport allowed the client to have the confidence to communicate openly and facilitate the therapist being able to increasingly target the treatment to that client. Bridget stated that listening to the client's "story" gives her more information than a formal assessment. David wanted to know "what passions they have" to help motivate them to actively participate in their healing. Lucy pointed out that she must gain the client's trust before she can do deeper work.

### What Makes a Difference?

When asked what they found effective, participants did not talk about techniques, but rather about the problem-solving process they used to achieve change. The initial step in the problem-solving process for each therapist was to gather information from the client, including their subjective experience of the issue, information about their life, movements, stresses, and injuries. Tom and Paul then included more formal orthopaedic testing, Bridget and David used movement, and Lucy used palpation as a primary source of information. Tess combined all of these in her assessments.

Five of the six participants spoke of using a process to systematically refine their treatment throughout a session. This did not appear to be a process that they were formally taught in their massage training, although it may be shared between colleagues or through professional development. Paul referred to this process as "assess–treat–reassess" (ATR) and also as "diagnostic treatment". He had the clearest conceptualisation of this as a specific process that he deliberately and consistently used:

> "… my overarching framework is literally assess, treat, reassess and then rethink your process and adapt it continually… and if I don't see a change, I'm gonna change what I'm doing… sometimes I'm like nup, that's not right. I need to… let's just go back…"

Participants described wanting to know quickly that they were addressing the right issue, and that the treatment was making an immediate change. As Paul said:

> "… if somebody got better over the next week, how do you know whether it's got anything to do with what you did. I want to do something for 30 seconds, no more than 30 seconds. And I want to know that that made a change, a direct change."

Treatment might take anywhere from 30 seconds to 15 minutes (Paul), or 3 to 8 minutes (David) in which they would look for changes in such things as range of movement, pain, functional movements such as putting on a bra or visual symmetry of posture or movement (Lucy), or the measurement of something "structural" (Paul). Paul was clear that he wanted also to know what happened between sessions as he was interested in finding things that made a "lasting change".

Overall, Tom tended to look for patterns of dysfunction rather than focus on the total uniqueness of each client, but he too used the assess–treat–reassess process to enable him to adapt his treatment continuously until he discovered what worked most effectively for that person. Lucy did

not describe this process specifically and did not appear to experiment to the same extent as the others. However, she stated that if she was not getting the results she wanted for a client, she would start to research—using books, and trying to learn more about the client, such as watching videos of their sports or musical performance—to try to figure out what might be happening so that she could adapt her treatment accordingly.

All participants gathered as much information as they could from the client and asked themselves questions to try to make sense of this information. They would then pick something that they thought might be relevant to assess, such as a movement, a pain level, a visual measurement, and use that to apply a treatment. Then they would reassess and determine whether they had made a change. If not, they would return to their detective work and repeat the process until they got the change they were after and could determine whether it was making a difference to the client.

## DISCUSSION

This study explored effectiveness from the perspective of experienced orthopaedic massage therapists. Rather than locating effectiveness in particular techniques or modalities, the participants discussed the need for individualised treatment that used problem-solving strategies and relationship to determine what would be most effective in each session.

### Everyone is Different, so Every Treatment is Different

Qualitative studies have explored the reasons that clients seek complementary therapies, and one frequently mentioned key motivator was that clients believed they would receive holistic and individualised care and treatment.[51,52] This theme supports and extends the findings of the existing massage therapy studies that investigate how massage therapists work.[24,32,33] The therapists in those studies were found to "operationalise their work in unique and nonstandard ways" (Fortune, Table 1, p.28)[32] by also focusing on the creation of individualised treatments rather than reliance on routines or protocols. This included both "deliberate individualization" and "spontaneous individualization" (Porcino, p.19).[24] Despite being separated in time, training, and geography (USA and Canada vs. Australia), there is a strong overlap of the conceptualisation of their work and even their language with the participants of this study. Porcino et al.[24] and Fortune & Hymel[32] included statements from their participants such as:

> "It depends on the client … because everybody's body is different. Even the same person is different on different days" (p.30).[32]

> "I have a negative connotation to the words protocol and rule… you're not listening to the body then and you're not responding to what you feel" (p.30).[32]

> "Every (patient) has to be individualized, 'cause everybody is different (Practitioner 16)" (p.18).[24]

The participant comments reported in these earlier studies are almost identical to the words, phrases, and concepts used by participants in the current study. It becomes therefore axiomatic that the appreciation of difference and the belief that treatment must be based on the specific needs, characteristics, and qualities of each client is an integral part of massage therapists' perception of their work. For massage therapists, the individualisation of treatment to meet the needs of each client cannot be separated from the effectiveness of that treatment.

Research conducted in allied health fields has explored the influence of various therapist characteristics on the efficacy of health interventions.[53-58] To date, exploration of massage therapist qualities has focused on constructs such as professionalism,[59,60] professional identity,[33] and success.[61] The willingness of these participants to "be ok with not knowing" with each client in each session suggests personal values and traits that allow the experienced massage therapist to sit with uncertainty. Medical researchers have developed a concept known as "tolerance of uncertainty" to represent a medical practitioner's emotional, cognitive, and behavioural reaction to uncertainty in diagnosis, in treatment, and in outcomes.[62-64] Lawton et al.[65] suggested that more experienced practitioners have a higher ability to cope with uncertainty, while less experienced practitioners, who have

a lower tolerance to uncertainty, react to the anxiety of not knowing the best action by ordering a greater number of tests and hospital admissions, thereby possibly taking early excessive action to create a sense of certainty prior to deciding upon a course of treatment.

Many forms of psychotherapy and psychoanalysis also rely on the idea that every patient is unique and that there is no predetermined treatment that can be applied; rather, it must emerge based on the particular circumstances of the individual.[66,67] Therefore, it might be expected that psychotherapists also work in a context of "not knowing", but of supporting the patient in working towards a positive outcome based on where the patient is "at" on that day. This underlies a concept found in psychotherapy known as "negative capability"—a phrase originally coined by John Keats:

> "... Negative Capability, that is, when a man is capable of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason..."[68]

A psychotherapist holds negative capability for a client by not providing an immediate answer or solution to their problem, but rather by being able to bear the emotions of not knowing[69] and stand beside the client through the anxiety of uncertainty[70] and frustration.[71] For the participants of this study, it appears that the same principle applies in massage, whereby the experienced massage therapist allows all of the information to emerge and by not having a protocol or preconceived idea, it allows them to listen, assess, and explore through talking, touch, and movement throughout the treatment session.

The participants of this study recognised the need for a therapeutic relationship which would help them to gain knowledge about their clients that would in turn allow them to individualise treatments that embraced the whole person. This supports the suggestion that the relationship might be important in determining the effectiveness of massage therapy.[22,61,72] Some authors in the field of physiotherapy have hypothesized that a good therapeutic relationship might improve treatment outcomes by influencing factors such as exercise adherence.[73,74] Miciak et al.[75] saw the individualisation of treatment as a means to creating the outcome of a therapeutic connection with the client. In contrast to these interpretations, the participants in the current study appeared to view the therapeutic relationship as an important tool to help them get to know their client well enough to be able to adapt each element of the treatment to where the client is at physically, socially, and emotionally.

### What then is Effective Treatment: What Makes a Difference?

To date, research into whether massage therapy is "effective" has not shown that a particular technique, stroke, or modality is conclusively effective or that any particular condition is effectively treated by massage. The results of this study would suggest that it is time to consider massage therapy as a holistic process, and to explore both that process and whether treatment effectiveness can be considered the result of such a process.

Independently of the various techniques and strokes that are the normal focus of massage research, the participants talked about a process they used to achieve physical changes that they thought would contribute to resolving the client's pain. In this study, Paul had a clear conceptualisation of the process "Assess–Treat–Reassess" (ATR). This is consistent with Porcino,[76] who also described a process where the therapist continuously assesses through palpation, observation, and questioning and then makes in-the-moment decisions about whether to continue with what they were doing or change to a new modality, technique, body area or stroke. In fact, the ATR process has been reported on across several studies in ways that again highlight the similarities in approach to—and conceptualisation of—their work from massage therapists. See for example:

> "... treatment process involves "an intricate feedback loop of assessment and treatment decision making occurring continuously throughout practice" (Porcino, p.95).[76]

> "Practitioners are constantly evaluating their treatment effectiveness and learning from it, both through in–the–moment reflection of their treatment and through observation of the same client over multiple visits" (Porcino, p.70).[76]

> "They (MTs) repeatedly assessed changes from their work's applications experientially,

> using palpations and visual signs... Even Runner with his standard routine said he relied on experiential feedback to know when to go on to the next stage...” (Fortune, p.133).[77]

Porcino et al.[24] considers the Assess–Treat–Reassess process to be the basis of how massage therapists individualise treatment. This study supports this, and further suggests that ATR is what experienced massage therapists do to provide effective treatment, despite focusing on the differences between people and, therefore, individualising every treatment to the needs of that client in that moment.

### Limitations of This Study

This study only represents the perspectives of these six orthopaedic massage therapists in Australia. It is not possible to generalise the concepts outlined here with any certainty to other massage therapists, particularly those with less experience, or focusing on different client populations or purposes of treatment. While all participants had many years of experience, their skill sets were not based on the same continuing education courses and, therefore, were not easily comparable. Caution is also required in accepting the interpretation of these results, as no formal assessment of data saturation was undertaken, and the number of interviews was limited for pragmatic reasons. However, both Braun and Clarke[41] and Low[78] have argued that it is always possible to find new meanings and interpretations in qualitative data and, therefore, it is not possible to reach saturation when using inductive thematic analysis. Furthermore, Author 1 is an Australian massage therapist and while all effort was made to limit potential researcher bias (e.g., by inclusion of non-massage therapists within the research team), it is acknowledged that this could not be completely mitigated.

### Implications and Recommendations for Research

In addition to providing insight into what massage therapists believe underlies effectiveness, the central theme of “difference” highlights a chasm between the practice of massage therapy and the traditional clinical research paradigm, which emphasises the minimisation of difference rather than its celebration. If individualisation of treatment is a core tenet of massage therapy, research methodological design may need to adapt to allow exploration of this. Whole-person research, mixed-methods, pragmatic effectiveness trials, and n–of–1 studies would potentially provide deeper insights into correlations that may lead to more targeted clinical studies in the future.[79-82] Studies in which the researcher observes the massage therapist in practice are challenging due to the intimate nature of massage therapy. However, they have been conducted,[22,32] and future studies that encompass the observation of treatments and the ability to ask therapists to explain their processes in real time would potentially have a greater ability to access their tacit knowledge, and to gain a deeper understanding of how they combine techniques, build treatments dynamically, and use clinical reasoning to work through client issues within a session.

## CONCLUSION

This study is the first to investigate what massage therapists consider is effective in massage treatment within the orthopaedic realm of massage. The participants were much more aware of the differences between people rather than the similarities, and focused on discussing the importance of individualising treatments for each client according to what they need at each and every session. Massage therapists must therefore be able to cope with the uncertainty of constant difference without relying on guidelines and checklists, but rather through their own abilities and their relationship with the client. Treatment effectiveness is achieved through a process of problem-solving rather than a predetermined application of techniques or strokes.

Results of the current study suggest that research into effective massage therapy might require a change in paradigm about what is investigated, and by which methodologies, in future research. In particular, future studies should consider the role that dynamic processes might play in achieving positive outcomes for recipients of orthopaedic massage therapy rather than continuing to focus on particular strokes, modalities, conditions or parts of the body.

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## CONFLICT OF INTEREST NOTIFICATION

The authors declare there are no conflicts of interest.

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## APPENDIX A: INTERVIEW GUIDE

What do experienced orthopaedic massage therapists consider to be the important aspects of effective treatment when working with a client with musculoskeletal pain and/or injury?

### Semi-structured Interviews:

Q. Share an experience of a client you have worked with that you believe demonstrates how you work, and how you feel you can help a client in a way that less experienced therapists might miss. What are the things that you brought (knowledge and specific things you did) that you think made that difference? (10 mins)

Q. Describe how you treat clients with pain or injury. Think of that last client we talked about, but also maybe think of a couple of other ones to think about what you do differently or the same between clients. I'm interested in how you think about it and what you actually do.

Q. Do you have an overarching framework that guides how you approach treatment and the order of things you do with a client?

Q. In relation to the experiences and clients discussed:

- What do you believe you do that makes a real difference?
- Compare the treatment strategies you currently use to those you were taught in massage college or continuing education classes. What do you do that is the same as you were formally taught and what is different?

### Additional question for when relevant:

Q. Why did you complete the Advanced Diploma/ Bachelor of Myotherapy after your remedial massage studies?